

Notice of Allowability

Application No.

10/822,116

Applicant(s)

HAYASHI, KATSUNORI

Examiner

Art Unit

TAN X. DINH

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/28/2005.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

TAN Xuan DINH
Primary Examiner
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- 1) The amendment filed 10/28/2005 is acknowledged.
- 2) Claims 1-20 are allowed.

The disk array apparatus, comprising a connector provided for connection with an external power supply to receive power from the external power supply, an internal power supply section for supplying the power received from the connector after AC/DC conversion, a plurality of disk drive cabinets, each connected to the internal power supply section, each including a first voltage converter for subjecting the power coming from the internal power supply section to DC conversion to derive a different voltage, a disk drive for receiving the power as a result of conversion by the first voltage converter, a first backup power supply for storing the power provided to the first voltage converter, a communications adapter connected to the internal power supply section for performing data exchange with an external device includes a second voltage converter for subjecting the power coming from the internal power supply section to DC conversion to derive a different voltage, a plurality of power consumption circuits for receiving the power as a result of conversion by the second voltage converter, a second backup power supply for storing the power provided to the second voltage converter, a disk adapter connected to the internal power supply section for controlling data writing or reading to/from the

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disk drive cabinets includes a third voltage converter for subjecting the power coming from the internal power supply section to DC conversion to derive a different voltage, a plurality of power consumption circuits for receiving the power as a result of conversion by the third voltage converter, a third backup power supply for storing the power provided to the third voltage converter, a memory section connected to the internal power supply section for storing data and control information to be written or read to/from the communications adapter and the disk adapter includes a fourth voltage converter to subject the power coming from the internal power supply section to DC conversion to derive a different voltage, a plurality of power consumption circuits for receiving the power as a result of conversion by the fourth voltage converter, a fourth backup power supply for storing the power provided to the fourth voltage converter, a mutual power supply line that is connected to the disk drive cabinets, the communications adapter, the disk adapter, and to the memory section so that when the power from the internal power supply section is interrupted, the mutual power supply line can supply backup power to any of the components in need of power using the first backup power supply provided to each of the disk drive cabinets, the second backup power supply provided to the communications adapter, the third backup

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power supply provided to the disk adapter, and the fourth backup power supply provided to the memory section, as recited in the independent claims, are not found or suggested in the prior art of record.

2) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN XUAN DINH whose telephone number is (571)272-7586. The examiner can normally be reached on MONDAY-FRIDAY from 8:00AM to 5:00PM.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TAN DINH
PRIMARY EXAMINER

November 28, 2005